

REMARKS

The office action and references cited and applied have been carefully considered together with the present application. Amendments have been made in an effort to place the application in condition for immediate allowance. Accordingly, reconsideration of the rejection of claims 1-58 is respectfully requested.¹

Claims 49 and 50 stand rejected under 35 U.S.C. §112 second paragraph for reciting “the node” without having a proper antecedent basis. Appropriate correction has been made by amendment and therefore, it is respectfully requested that the 35 U.S.C. §112 rejection be withdrawn.

Claims 1-6, 10, 12, 16-19, 25-30, 32, 36, 40-43, and 50-58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Krohn* (U.S. Publ. No. 2004/0236965) in view of *Balfanz et al.* (U.S. Pat. No. 7,392,387), in further view of *Dondeti et al.* (U.S. Pat. No. 6,263,435), and in further view of *Palekar* (U.S. Publ. No. 2003/0226017). It is believed that these claims are not taught or suggested by these cited references.

Under the analysis required by *Graham v. John Deere*, 383 U.S. 1 (1966) to support a rejection under § 103, the scope and content of the prior art must first be determined, followed by an assessment of the differences between the prior art and the claim at issue in view of the ordinary skill in the art. In the present case, the scope and content of the prior art, as evidenced by *Krohn*, *Balfanz*, *Dondeti*, and *Palekar* do not include the subject matter of claims 1-6, 10, 12, 16-19, 25-30, 32, 36,

¹ Applicant notes that the Examiner checked box #5 on the Office Action Summary indicating that all of the pending claims are allowed. However, as confirmed by the Examiner during a telephone conference with Applicant, the Examiner intended to check box #6 indicating that the pending claims are rejected to correspond with the Examiner’s arguments presented in the Detailed Action section of the Office Action.

40-43, and 50-58. Accordingly, Applicant respectfully requests reconsideration of the rejected claims.

The Examiner correctly acknowledges that *Krohn* in view of *Balfanz* and in further view of *Dondeti*, fails to disclose several features of claim 1, specifically, the steps of “providing, by a first node, a component value A1; providing, by an adjacent node, a component value B1 as a challenge to the first node; performing, by the first node, a handshake process with the adjacent node to determine membership in a secure group; wherein the handshake process comprises requiring each of the first node and the adjacent node to calculate identical values by applying the component values A1 and B1, and a key value associated with the secure group, to a one way function $f(x)$.” However, the Examiner asserts that such steps are disclosed by *Palekar*. Applicant respectfully disagrees.

Palekar discloses an authentication procedure between an authenticator and a client. The procedure “begins with the authenticator sending the challenge (i.e., a component value) to the client” (Paragraph [0083]). Next, “the client then responds with a calculated value and a challenge of its own” noting that “***the calculated value could be a hash of the challenge and a password***” (*Id.*, emphasis added). Finally, “the authenticator calculates internally the value it expects from the client [and] compares those values” to determine if authentication is successful. (*Id.*).

This procedure fails to disclose the features of claim 1. Indeed, as discussed above, claim 1 recites a handshake process whereby the first node and the adjacent node calculate values by ***applying three values to a one way function*** (e.g., a hash function). These three values include component value A1, component value

B2, and a key value associated with the secure group. *Palekar* does not disclose applying such values to a one way function. Indeed, *Palekar* only discloses calculating a value by applying a single component value and a password to a hash function.

Notably, *Palekar* discloses that the protocol authentication procedure provides for the “use of additional inputs into the hash equation, as will be described in more detail below.” (*Id.*). However, the only other discussion in *Palekar* with respect to the described authentication procedure discusses packet length attributes and these are not even discussed with respect to being inputs in the described hash function (See Paragraph [0085]).

As such, while *Palekar* discloses two component values (one associated with the authenticator entity and one associated with the client entity), the one way function only takes as input ***a single component value***. As noted, *Palekar* discloses calculating a hash value using the challenge and a password as inputs. While the language of *Palekar* is ambiguous as to which challenge (i.e. component) value is being used, it is clear that only a single value is being used (by use of “***the*** challenge”). Further, there is no reference anywhere in *Palekar* to a key value associated with the secure group, let alone that value being included as an input along with the two component values into the one way function as recited in claim 1.

Finally, Applicant submits that it is improper to combine the cited references to make a rejection under 35 U.S.C. 103(a). For example, consider the last step in claim 1 which recites “distributing secure information from the first node to the adjacent node, if the adjacent node is proven to be a member of the secure group.”

This step contains a condition (“if the adjacent node is proven...”) and an action (“distributing secure information...”) to be performed if that condition is satisfied. The Examiner attempts to show this element is known in the prior art by citing one reference as disclosing the condition (*Dondeti*) and citing another as disclosing the action (*Balfanz*). Such a rejection fails to acknowledge the inherent logical relationship between the two parts of an “if-then” statement. Applicant respectfully suggests that this rejection evidences "picking and choosing" features, taking them out of context and combining them when there is no suggestion in those references to do so. As such, Applicant respectfully requests the §103 rejection of claim 1 and its corresponding dependent claims be withdrawn.

Finally, Applicant submits that each of the arguments made above are applicable to the remaining independent claims, which have also been rejected using at least the references cited above. As such, Applicant respectfully submits that all the independent claims and their corresponding dependent claims be reconsidered and placed into condition for allowance. Should the Examiner discover there are remaining issues which may be resolved by a telephone interview, he is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
GREER, BURNS & CRAIN, LTD.

By */Roger D. Greer/*
Roger D. Greer
Registration No. 26,174

June 9, 2009

300 South Wacker Drive, Suite 2500
Chicago, Illinois 60606
(312) 360-0080
Customer No. 24978